Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Currently Amended) A method of monitoring traffic in a network comprising the steps of:

receiving at least one data packet at a network interface, said network interface~~further~~ comprising:

a) a ~~run-time system~~ first module handling

communications between ~~interacting with~~ the network and

a host, and

b) at least one ~~or more~~ programmable processing ~~modules~~

in communication with said first module ~~through an~~

~~application programming interface~~; and

processing information in the at least one data packet ~~at~~ using the at least one ~~a~~ programmable processing ~~block~~ module, ~~thereby~~ to ~~generate~~ing ~~output~~ ~~using the application programming interface which can be relayed from the~~ ~~network interface to the host~~ network information.

2.   (Currently amended) The ~~invention~~ method of claim 1 wherein the ~~network interface comprises a plurality of processing modules blocks and~~ ~~wherein a plurality of outputs~~ network information ~~are~~ is ~~generated by the~~ ~~processing modules blocks which~~ can be relayed from the network interface to the host.

3.   (Currently amended) The ~~invention~~ method of claim ~~2~~ 1 wherein the at least one programmable processing ~~blocks~~ module ~~are~~ is generated from a processing query expressed in a high-level language.

4.   (Currently amended) The ~~invention~~ method of claim 3 wherein the processing query accesses functions defined in the <u>first module</u> ~~run-time system~~.

5.   (Currently amended) The ~~invention~~ method of claim ~~2~~ <u>1</u> wherein the ~~outputs~~ <u>network information is</u> ~~are~~ condensed statistics of network performance.

6.   (Currently amended) The ~~invention~~ method of claim 1 wherein the <u>at least one programmable</u> processing <u>module</u> ~~block~~ performs filtering on the information in the <u>at least one</u> data packet.

7.   (Currently amended) The ~~invention~~ method of claim 1 wherein the <u>at least one programmable</u> processing <u>module</u> ~~block~~ performs a transformation on the information in the <u>at least one</u> data packet.

8.   (Currently amended) The ~~invention~~ method of claim 1 wherein the <u>at least one programmable</u> processing <u>module</u> ~~block~~ performs aggregation on the information in the <u>at least one</u> data packet.

9.   (Currently amended) The ~~invention~~ method of claim 1 wherein the <u>first module</u> ~~run-time~~ can pass parameters to the <u>at least one</u> processing <u>module</u> ~~block~~, thereby changing the processing performed by the <u>at least one</u> processing <u>module</u> ~~block~~.

10.   (Currently amended) The ~~invention~~ method of claim 1 wherein the <u>first module</u> ~~run-time system~~ can instantiate new processing <u>modules</u> ~~blocks~~ dynamically.

11.   (Currently amended) The ~~invention~~ method of claim 1 wherein the network is a Gigabit Ethernet network.

12.   (Currently amended) The ~~invention~~ <u>method</u> of claim 11 wherein the <u>at least one</u> data packet is an Internet Protocol datagram.

13.   (Currently amended) An apparatus for monitoring <u>traffic</u> in a network comprising:

a ~~run-time system~~ <u>network interface receiving at least one data packet, said network interface comprising:</u> ~~which can execute at a network interface~~

<u>(a) a first module handling communications between the network and a host,</u> ~~and receive information from data packets in a network;~~ <u>and</u>

<u>(b) at least</u> one ~~or more~~ <u>programmable</u> processing blocks ~~interacting with the run-time system through an application program interface~~ <u>in communication with the first module and</u> ~~such that the processing blocks can~~ process<u>ing</u> ~~the~~ information in the <u>at least one</u> data packet<u>s</u> <u>to</u> ~~and~~ generate <u>network information</u> ~~output using the application program interface which can be relayed from the network interface to a host~~.

14.   (Currently amended) The ~~invention~~ <u>apparatus</u> of claim 13 wherein the ~~apparatus comprising~~<u>es a plurality of</u>:

~~processing blocks and wherein a plurality of outputs are~~ <u>network information</u> <u>is</u>~~generated by the processing blocks which~~ can be relayed from the network interface to the host.

15.   (Currently amended) The ~~invention~~ <u>apparatus</u> of claim 14 wherein the <u>at least one programmable</u> processing <u>module</u> ~~blocks~~ <u>is</u> ~~are~~ generated from a processing query expressed in a high-level language.

16.   (Currently amended) The ~~invention~~ <u>apparatus</u> of claim 15 wherein the processing query accesses functions defined in the <u>first module</u> ~~run-time system~~.

17.   (Currently amended) The ~~invention~~ <u>apparatus</u> of claim 14 wherein the <u>network information is</u> ~~outputs are~~ condensed statistics of network performance.

18.   (Currently amended) The ~~invention~~ apparatus of claim 13 wherein the <u>at</u> <u>least one</u> processing <u>module</u> ~~block~~ performs filtering on the information in the <u>at</u> <u>least one</u> data packet.

19.   (Currently amended) The ~~invention~~ apparatus of claim 13 wherein the <u>at</u> <u>least one programmable</u> processing <u>module</u> ~~block~~ performs a transformation on the information in the <u>at least one</u> data packet.

20.   (Currently amended) The ~~invention~~ apparatus of claim 13 wherein the processing <u>module</u> ~~block~~ performs aggregation on the information in the <u>at least</u> <u>one</u> data packet.

21.   (Currently amended) The ~~invention~~ apparatus of claim 13 wherein the <u>first</u> <u>module</u> ~~run-time-system~~ can pass parameters to the <u>at least one</u> processing <u>module</u>~~block~~, thereby changing the processing performed by the <u>at least one</u> processing <u>module</u> ~~block~~.

22.   (Currently amended) The ~~invention~~ apparatus of claim 13 wherein the <u>first</u> <u>module</u> ~~run-time-system~~ can instantiate new processing <u>modules</u> ~~blocks~~ dynamically.

23.   (Currently amended) The ~~invention~~ apparatus of claim 13 wherein the network is a Gigabit Ethernet network.

24.   (Currently amended) The ~~invention~~ apparatus of claim 23 wherein the data packet is an Internet Protocol datagram.